



Dawcul is pleased to partner with Alfa Laval in Lithuania, providing refineries with industry leading heat exchange products that provide superior reliability and performance alongside greater efficiency for improved sustainability.

Alfa Laval is a leading global provider of specialised products across a range of industries. Key technologies include energy saving products for heat transfer, separation and fluid handling.

Heat exchangers play a key role in the transition to a more sustainable world. Replacing traditional shell and tube heat exchangers with welded plate heat exchangers creates enormous opportunities to recover and reuse heat, thereby substantially reducing CO₂ emissions.

Products

Packinox

A Packinox heat exchanger is ideal for demanding heat recovery duties in processes with high pressures and temperatures. Its outstanding thermal performance, superior hydraulic efficiency and low CAPEX allow you to optimise energy efficiency, increase profitability and improve sustainability. A Packinox enables higher yield and recovers more heat than a shell-and-tube solution, resulting in better ROI and a lower environmental impact. Packinox is also available as plate-and-frame configuration.

Benefits

- ◆ Lower OPEX – The high heat recovery leads to substantial energy savings.
- ◆ Maintenance costs are also low thanks to minimal fouling.
- ◆ Lower CAPEX – A single Packinox can replace several large shell-and-tubes and makes it possible to operate processes with smaller furnaces and cooling
- ◆ Higher process yield thanks to a low pressure drop, optimal liquid/gas mixing, high operating flexibility and a fully customized design.
- ◆ Reliable, proven technology – More than 350 units in operation worldwide.
- ◆ Real-time monitoring and continuous optimization by Alfa Laval experts



Packinox Heat Exchanger

Alfa Laval

Packinox+

Thanks to the new FlexFlow technology, a Packinox+ heat exchanger can be optimized for highly asymmetric flows and offers a range of flow configurations, including multi-stream arrangements, making it highly suitable for a broad spectrum of demanding process duties.

Robust performance

Combining high temperature and pressure resistance with exceptional thermal and hydraulic performance, Alfa Laval Packinox+ is a compact solution for maximum energy recovery in positions with high flowrates, temperatures, and pressures.

Compabloc

With over 30,000 units installed worldwide, the Compabloc heat exchanger is popular due to its compact design, reliability, and resilience in the most demanding of environments, withstanding extreme temperatures and high pressures.



Compabloc Heat Exchanger

The high performance, high reliability and short payback time has made Packinox the industry standard in many energy-intensive applications.

- ◆ Outstanding heat transfer efficiency, enabling large energy savings and cuts in CO₂ emissions
- ◆ Robust design brings reliable uptime - even in the toughest applications
- ◆ Perfect for heat recovery duties with very long temperature programmes
- ◆ Ideal for asymmetric flows thanks to FlexFlow technology
- ◆ Low CAPEX and short payback time

Benefits

- ◆ Superior heat transfer and minimal fouling to provide exceptional thermal efficiency and energy savings
- ◆ Asymmetric flows handled easily with flexible flow configurations
- ◆ Crossing temperatures in a single unit maximizes energy recovery, reduces power bills, and boosts your process performance
- ◆ 100% mechanically cleanable with no crevices that can cause corrosion issues
- ◆ Fully confined graphite gasket and laser-welded plates to optimize reliability
- ◆ Easy access for mechanical cleaning

Specifications

Design temperature	400°C (752°F), down to -100°C (-148°F)
Design pressure	From full vacuum to 42barg (600psig)
Maximum heat transfer area	840m ² (8,985 ft ²)
Maximum liquid flow rate per unit	6,000m ³ /h (26,250 US gpm)
Lowest achievable temperature difference	3°C (5.4°F)
Duties	Heat recovery, cooling, heating, condensation, partial condensation, reboiling, evaporation and gas cooling.
Performance	Low to high thermal length or NTU duty. Handles any corrosive medium

Alfa Laval

Spiral Heat Exchanger

The Type 1 Spiral Heat Exchanger provides heat transfer technology for liquid-liquid fouling duties. It is exceptionally compact and has a self-cleaning design which makes it an excellent choice when one or both fluids are fouling.

Benefits

- ◆ Each unit is fully customized, offering the best thermal fit for the specific duty
- ◆ Self-cleaning effect reduces operating cost
- ◆ Low maintenance cost due to easy access
- ◆ High heat transfer efficiency, higher than in shell & tubes
- ◆ Unique ability to handle two highly fouling fluids
- ◆ Every unit is fully drainable
- ◆ Condensers have virtually no vapour side pressure drop
- ◆ Column mounting of condensers reduces installation costs
- ◆ Increased energy savings and reduced emissions thanks to thermal efficiencies 2-3 times higher than comparable shell-and tube exchangers



Spiral Heat Exchanger

CB Brazed Heat Exchanger

High efficiency, superior mechanical resistance and a compact footprint make Alfa Laval's CB line of brazed plate heat exchangers ideal for demanding installations where space is limited.

Increased thermal efficiency within a compact unit makes it possible to tackle large-capacity duties where installation space is limited. The gasket-free design also allows for reliable performance in high-pressure and high-temperature applications.

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With a huge range of available sizes, capacities, plate patterns and connections, along with single-, dual- and multi-pass configurations, the available duties are practically endless. Additionally, CB units are available with AHRI certification as well as major pressure vessel and marine industry approvals.

Benefits

- ◆ Wide variety of models and configurations make it possible to get the perfect fit for your application and duty
- ◆ Alfa Laval's asymmetric FlexFlow plate design enables efficient performance with any type of refrigerant or in any liquid-to-liquid application
- ◆ The patented IceSafe design protects CB units from crystal formation in refrigerant condenser duties where defrosting is required
- ◆ For secondary heat exchangers used with gas boilers, Alfa Laval offers a range of extra-small asymmetric CB units
- ◆ One compact design available in models for pressures ranging from 32 to 90 bar



CB Brazed Heat Exchanger

Alfa Laval

Alfa Nova Fusion Bonded Heat Exchanger

Alfa Laval's patented AlfaFusion bonding technology creates highly efficient, compact heat exchangers made entirely of stainless steel. Virtually maintenance free and capable of handling extremely high pressures and temperatures, they are an ideal heat transfer solution for challenging applications. These include duties with high cleanliness demands, with aggressive media such as ammonia, or where copper or nickel pose contamination risks.

The breakthrough manufacturing technique combines improved hygiene and corrosion resistance with the high efficiency and compact footprint of a brazed plate heat exchanger. By enabling a full stainless steel construction, their fusion-bonded AlfaNova heat exchangers can be used in installations normally reserved for conventional semi-welded and welded technologies.

Benefits

- ◆ 100% stainless steel construction means 100% recyclability



Alfa Nova Fusion

- ◆ Resists corrosion from aggressive media and process fluids
- ◆ Prevents nickel or copper-contamination when working with drinking water or any other hygienic fluid
- ◆ AlfaFusion technology enables higher temperature resistance than traditional brazed heat exchangers with same high-pressure capabilities
- ◆ Optimized plate design with asymmetric channel configuration provides maximum efficiency in demanding heating and cooling applications

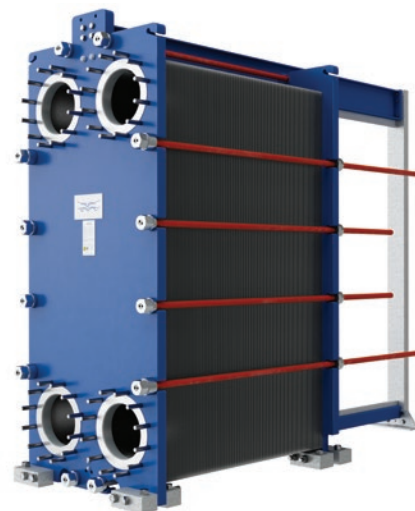
Gasketed Plate Heat Exchangers

Alfa Laval's wide range of industrial gasketed plate heat exchangers is suitable for all types of industry and multiple applications from heating, cooling and heat recovery to condensation and evaporation.

Their industrial plate heat exchangers are energy efficient, compact, simple to maintain, easy to adjust for capacity changes and represent a relatively low capital investment. The vast range of options of size, plate and gasket material, and add-ons, means they can be specifically designed and configured for your application, from the simplest of duties to the most demanding where requirements on both performance and documentation are high.

Benefits

- ◆ High energy efficiency
- ◆ Maximum uptime - less fouling, stress, wear and corrosion
- ◆ Flexible - configurable for broad range of applications
- ◆ Ensures optimal performance in specific applications based on specific needs



Gasketed Plate Heat Exchangers

- ◆ Easy to install
- ◆ Compact units - space saving, easy to service and maintain
- ◆ High serviceability

Dawcul is an authorised representative for Alfa Laval for the refinery market in Lithuania
For more information please contact your local representative.



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